

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 October 2004 (21.10.2004)

PCT

(10) International Publication Number
WO 2004/089061 A2

- (51) International Patent Classification⁷: **A01G**
- (21) International Application Number:
PCT/IL2004/000322
- (22) International Filing Date: 13 April 2004 (13.04.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/461,823 11 April 2003 (11.04.2003) US
- (71) Applicant (for all designated States except US): **BIO-OZ ADVANCED BIOTECHNOLOGICAL AGRICULTURE LTD.** [IL/IL]; Yad Mordechai, 79145 D. N. Hof Ashkelon (IL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **HEMO, Rony** [IL/IL]; Kibbutz Kfar Aza, 85142 MP HaNegev (IL). **MAOZ, Itay** [IL/IL]; Kibbutz Nahal Oz, 85145 MP HaNegev (IL). **DLOOMI, Yarden** [IL/IL]; Kibbutz Nahal-Oz, 85145 MP HaNegev (IL). **YARDEN, Gal** [IL/IL]; Nir-Moshe 215, 85370 MP HaNegev (IL).
- (74) Agent: **G.E. EHRLICH (1995) LTD.**; 11 Menachem Begin Street, 52 521 Ramat Gan (IL).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LIQUID DISCHARGE APPARATUS PARTICULARLY USEFUL AS A PORTABLE INOCULATION GUN FOR ANTI-VIRUS INOCULATION OF PLANTS

(57) Abstract: Liquid discharge apparatus, particularly useful as a portable inoculation gun for anti-virus inoculation of plants, includes a housing having a handle at one end configured for convenient grasping by a user, a nozzle at the opposite end for discharging liquid from a discharge opening therein, and a manipulable member manually actuatable to produce a discharge of liquid from the nozzle. The nozzle includes a gas passageway communicating with the discharge opening, and a liquid passageway communicating with the gas passageway. A gas delivery system is actuatable by the manipulable member to discharge gas at high-velocity through the discharge opening via the gas passageway. A liquid source communicates with the liquid passageway in the nozzle such that each high-velocity discharge of gas from the nozzle via the gas passageway draws a quantity of liquid from the liquid source into the gas passageway and discharges it at high-velocity with the gas through the discharge opening.